MEGA CORP.® WORLDWIDE

SPECIALTY HAULAGE SOLUTIONS FOR CONSTRUCTION AND MINING

PRODUCT INFORMATION BULLETIN

Water Level Indicator Replacement

Applicable to:

Any Mega spray control system shipped prior to March 2016 that need a replacement for the water level indicator.

Modification:

Installation, calibration, and initial set-up of replacement water level indicator for Mega spray control systems.

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WARNING, CAUTION AND NOTES

The following definitions are found throughout the manual and apply as follows:

⚠️ **WARNING**

Operating procedures and techniques, which could result in personal injury and/or loss of life if not carefully followed.

CAUTION

Operating procedures and techniques, which could result in damage to equipment if not carefully followed.

NOTE

Operating procedures and techniques that are considered essential to emphasize.

USE OF SHALL, WILL, SHOULD AND MAY

Shall and **Will** – Used when application of a procedure is mandatory.
Should – Used when application of a procedure is recommended.
May - Used to indicate an acceptable or suggested means of accomplishment.

COMMON DEFINITIONS AND ABBREVIATIONS

LT – Left (as viewed from the rear of the machine looking forward)
RT – Right (as viewed from the rear of the machine looking forward)

DESCRIPTION

This water level indicator is a direct replacement for the older, now-obsolete water level indicator (included on spray systems shipped prior to March 2016). However, the newer model has more configuration options and a different linear calibration procedure. This document is intended to assist with calibration and initial setup of the replacement water level indicator.

WATER LEVEL INDICATOR INSTALLATION

1. Ensure that the unit is shut off, chocked, and safe for maintenance before proceeding.

1. Remove power to the cab control.

2. Remove cab control face plate to gain access to the backside of the water level indicator.

3. Disconnect the 8 pin connector from the backside of the indicator.

4. Remove the old water level indicator.

5. Install new water level indicator and secure with mount screws. The new water level indicator is a direct replacement for the old water level indicator in terms of installation.
    a. Reconnect the 8 pin connector to the new water level gauge.
    b. Reinstall the cab control face plate.

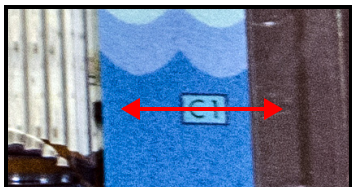6. Apply power to the cab control box and allow the new gauge to warm up for at least 2 minutes.

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WATER LEVEL INDICATOR LINEAR CALIBRATION

NOTE

The term 'swipe' means to move the tip of the calibration magnet tool up to and then away from either the C1 or the C2 sensor on the front right-hand side of the display:

Slowly *Swipe* in either direction

1. Fill water tank to maximum capacity.

2. Turn SYSTEM ON and allow the system to warm up for at least 2 minutes.

3. Swipe the magnet four (4) times at **C 1** and four (4) times at **C 2** to enter the linear calibration mode.

NOTE

Do not wait more than six seconds in-between swipes, or the session will time out and you will have to start over.

4. Once the calibration code has been entered and linear calibration mode is active, **wait for five seconds**.

5. After five seconds, the top four and bottom four display LEDs should flash alternately on and off to indicate that the code has been accepted. **While the LEDs are still flashing**, hold the magnet steadily at **C 2** for five seconds in order to set the calibration into memory.

6. After a few seconds, the calibration mode will terminate, and all LEDs will illuminate to show that the water tank is at full capacity.

7. After performing calibration, **if and only if** the gauge shows 1 or 2 lights LESS than FULL, perform the Full Tank Correction calibration as follows:
   a. Swipe the magnet five (5) times at **C 1** and five (5) times at **C 2** to enter the linear calibration mode. The top and bottom five display LEDs should flash on and off.
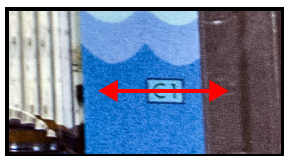
NOTE

Do not wait more than six seconds in-between swipes, or the session will time out and you will have to start over.

   b. Wait three seconds, then hold the magnet tool at **C 2** for five seconds to complete the calibration.

   c. After six seconds, the calibration mode will terminate and all of the LEDs should illuminate to show that the water tank is at full capacity.

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WATER LEVEL INDICATOR DISPLAY ADJUSTMENTS

Slowly *Swipe* in either direction

The term 'swipe' means to move the tip of the calibration magnet tool up to and then away from either the C1 or the C2 sensor on the front right-hand side of the display.

BRIGHTNESS ADJUSTMENT
The new water level indicators have two brightness modes: day-time and night-time. A light sensor allows the indicator display to switch automatically between the two modes. **It is highly recommended to set the brightness levels of both modes to the minimum value** (brightness level **1** on a scale of 1-10 with 10 being the brightest) as the default setting is bright enough to induce discomfort.

To adjust day-time brightness (default is 8)
1. Turn SYSTEM ON and allow the system to warm up for at least 2 minutes.

2. Swipe the magnet three (3) times at **C 1** and one (1) time at **C 2** to enter the linear calibration mode. After a few seconds, the top three LEDs and the very bottom LED should flash on and off.

> **NOTE**
>
> Do not wait more than six seconds in-between swipes, or the session will time out and you will have to start over.

3. Enable brightness setting entry by holding the magnet tool at **C 2** for 5 seconds.

4. Adjust the brightness by swiping the magnet tool at **C 1** until the brightness level reaches its **minimum value** (1).

5. Save the new brightness setting by holding the magnet tool at **C 2** for 5 seconds.

To adjust night-time brightness (default is 2)
1. Turn SYSTEM ON and allow the system to warm up for at least 2 minutes.

2. Swipe the magnet three (3) times at **C 1** and two (2) times at **C 2** to enter the linear calibration mode. After a few seconds, the top three LEDs and the bottom two LEDs should flash on and off.

> **NOTE**
>
> Do not wait more than six seconds in-between swipes, or the session will time out and you will have to start over.
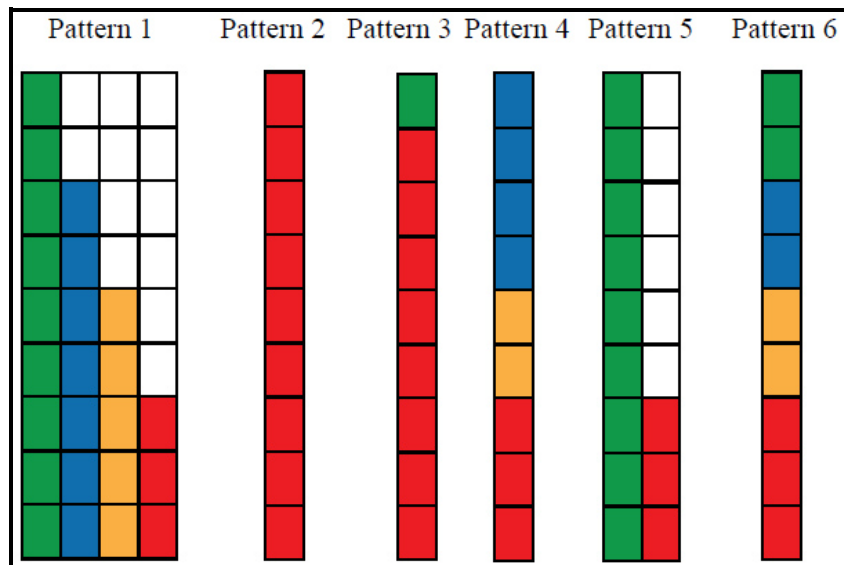
3. Enable brightness setting entry by holding the magnet tool at **C 2** for 5 seconds.

4. Adjust the brightness by swiping the magnet tool at **C 1** until the brightness level reaches its **minimum value** (1).

5. Save the new brightness setting by holding the magnet tool at **C 2** for 5 seconds.

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COLOR PATTERN SELECTION

The water level indicator display has six (6) total color patterns to select from. The default color pattern is Pattern 1:

Pattern 1: One solid color, color changes depending on water level: FULL--green, 3/4 tank--blue, 1/2 tank--orange, 1/4 tank--red, EMPTY--red.

Pattern 2: All red

Pattern 3: Top 1/8 water level is green, below that is red

Pattern 4: Three colors: blue\orange\red

Pattern 5: All green, turns red when water level is detected to be at or below 1/4 tank.

Pattern 6: Four fixed colors for each 1/4 tank increment: green\blue\orange\red

1. Turn SYSTEM ON and allow the system to warm up for at least 2 minutes.

2. Select one of the color pattern settings as follows:
   a. Swipe the magnet one (1) time at **C 1** and one (1) time at **C 2** to select **Pattern 1**
   b. Swipe the magnet one (1) time at **C 1** and two (2) times at **C 2** to select **Pattern 2**
   c. Swipe the magnet one (1) time at **C 1** and three (3) times at **C 2** to select **Pattern 3**
   d. Swipe the magnet one (1) time at **C 1** and four (4) times at **C 2** to select **Pattern 4**
   e. Swipe the magnet one (1) time at **C 1** and five (5) times at **C 2** to select **Pattern 5**
   f. Swipe the magnet one (1) time at **C 1** and six (6) times at **C 2** to select **Pattern 6**

NOTE

Do not wait more than six seconds in-between swipes, or the session will time out and you will have to start over.

3. Wait five (5) seconds.

4. After five seconds, the very top LED and between 1-6 (matching the number of times **C 2** was swiped) of the bottom display LEDs should flash alternately on and off to indicate that the code has been accepted. **While the LEDs are still flashing**, hold the magnet steadily at **C 2** for five seconds in order to set the calibration into memory.